

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-03300014-2011**
Application Received: **October 25, 2010**
Plant Identification Number: **033-00014**
Permittee: **Dominion Transmission, Inc.**
Facility Name: **Law Compressor Station**
Mailing Address: 445 West Main Street
Clarksburg, WV 26301

Revised: N/A

Physical Location: Good Hope, Harrison County, West Virginia
UTM Coordinates: 545.88 km Easting • 4335.35 km Northing • Zone 17

Directions: From Clarksburg take Route 19 South thru Good Hope for 11 miles. Turn right across iron bridge onto Two Lick Road. Go 1.1 miles then turn right thru gate. Go 0.3 miles to station at top of hill.

Facility Description

Law Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of two (2) 660 HP natural gas fired reciprocating engines, one (1) dehydrator reboiler, one (1) dehydration unit with a flare, one (1) air compressor, and seven (7) storage tanks of various sizes.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions ¹	2009 Actual Emissions ²
Carbon Monoxide (CO)	67.2	31.40
Nitrogen Oxides (NO _x)	260.2	211.62
Particulate Matter (PM ₁₀)	0.6	0.33
Total Particulate Matter (TSP)	0.6	0.33
Sulfur Dioxide (SO ₂)	0.05	0.02
Volatile Organic Compounds (VOC) ³	140.5	106.80

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions ¹	2009 Actual Emissions ²
Acrolein	0.37	0.25
Acetaldehyde	0.37	0.25
Benzene	0.74	1.86
Ethylbenzene	0.84	0.01
Formaldehyde	2.63	1.37
Hexane	0.40	0.12
Xylene	9.33	0.02
Toluene	2.54	3.25

¹Based on 2009 Sampling Data and Actual throughputs.

²Based on 2008 Sampling Data.

³VOC PTE was increased after revision of GLYCalc PTE estimate for the dehydration unit.
 Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit over 100 TPY of NO_x and VOCs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Opacity Requirements for boilers
	45CSR6	Open burning prohibited.
	45CSR10	Sulfur requirements for fuel burned
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart HH	Oil and natural gas production facilities.
	40 C.F.R. Part 63, Subpart ZZZZ	Reciprocating internal combustion engines.
State Only:	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.
	45CSR17	Control fugitive particulate matter
	45CSR42	Greenhouse Gas Emissions Inventory
		Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
N/A		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

New Boilerplate Language

In addition to formatting and other minor changes, the following boilerplate changes were made from the previous Title V permit (R30-03300014-2006):

- Conditions 3.1.9. and 3.5.10. were added to address greenhouse gas emission and reporting.
- Conditions 3.5.3. and 3.5.5. were revised to address electronic submittal of the annual compliance certification to the US EPA.

Addition of Condition 5.1.8.

This condition was added to address this facility's applicability to 40 CFR 63, Subpart HH. Based on the revised PTE data submitted by Dominion, this facility is exempt from this subpart, as stated in 40 C.F.R. §63.764(e)(1)(ii), since it emits less than 1 tpy of benzene.

If this facility ever exceeds 1 tpy of benzene, this it would be subject to 40 C.F.R. §63.764(d)(2). The facility would be required to calculate the optimum glycol circulation rate and operate the dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate. Additionally, a record of determination must be maintained.

Revisions to Condition 5.2.1.

Condition 5.2.1. was revised to include language modeled after what is used in current synthetic minor permits. It also provides clarifications for GLYCalc emission modeling. This new language lists actual operating parameters to be used in the modeling and provides instructions on estimates that can be used in this modeling.

Testing Frequencies in Conditions 5.2.3. and 5.2.4.

These conditions required the permittee to sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. This testing frequency was decreased from annually to once per permit term. Documents provided by Dominion show that these test results are orders of magnitude below the sulfur limits, thus annual testing is not necessary.

Changes Due to Xylene PTE (Conditions 5.3.1. and 5.5.2)

The testing frequency (to determine wet natural gas composition) in condition 5.3.1 was increased. The previous Title V permit required testing within 180 days of permit issuance and no more than two years before the renewal permit application due date. With this renewal, testing is required annually.

This increased testing frequency is necessitated by the Potential to Emit (PTE) of Xylene, which is 9.33 TPY. This PTE is approaching the major source threshold of 10 TPY for any single HAP. Since this PTE is approaching the major source threshold, additional monitoring is necessary to more closely monitor any changes in the wet natural gas composition to determine if the 10 TPY threshold will be reached in the future.

Condition 5.5.2, reporting requirements for the testing required in condition 5.3.1., was also revised. The report now requires an annual average emissions estimate instead of a PTE estimate. Additional records are required to be submitted with this report. Additionally, a custody transfer point was defined, for clarity, as the point where the gas enters into a natural gas transmission and/or storage pipeline (as referenced in 40 C.F.R. 63, Subpart HH).

40 CFR 63, Subpart ZZZZ RICE MACT Applicability

The two engines (EN01 and EN02) are existing spark-ignition (SI) two-stroke lean burn (2SLB) Cooper GMXE-8 Reciprocating Engines/Integral Compressors that combust pipeline quality natural gas and are rated at 660 hp. The compressor (CPR01) is an existing SI four-stroke rich burn (4SRB) Ingersoll Rand

15-T Air Compressor that combusts pipeline quality natural gas and is rated at 15 hp. As stated below, the engines and compressor meet the definition for reciprocating internal combustion engines (RICE) according to 40 CFR § 63.6685(a):

A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Since this facility is not a major source of HAPS, this MACT's area source requirements apply. RICE within the horsepower range for the two engines fit into the 2SLB engines greater than 500 hp category as established by the regulation. The air compressor fits into the 4SRB less than 500 hp category.

The engines are subject to the maintenance requirements (every 4,320 hours change oil/filter, inspect spark plugs, and inspect hoses/belts). The air compressor is also only subject to maintenance requirements (every 1,440 hours change oil/filter, inspect spark plugs, and inspect hoses/belts).

According to the RICE Summary Table of requirements provided by the EPA (<http://www.epa.gov/ttn/atw/rice/ricepg.html>), none of the units have testing, notification, or reporting requirements under Subpart ZZZZ. The only applicable RICE MACT requirements are:

- 40 CFR § 63.6603: Emission Limitations
- 40 CFR § 63.6605: Continuous Compliance
- 40 CFR §§ 63.6625 (e), (h), and (i): Monitoring Requirements
- 40 CFR § 63.6640: Continuous Compliance
- 40 CFR § 63.6655: Recordkeeping Requirements

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 63, Subpart ZZZZ-RICE MACT. Since the air compressor is less than 100 hp and there are no numerical emission standards for the engines or air compressor, this facility is exempt from this MACT's reporting requirements as stated in 40 C.F.R. § 63.6645.

40 CFR 64-Compliance Assurance Monitoring. This is the second permit renewal for this facility. At the time of the first renewal, CAM was determined not to be applicable to the sources at this facility. Therefore, a CAM applicability determination is not required.

40 C.F.R § 60.18. Flare is used only to control the odor. Even without flare the facility is not a major source of HAPs. Therefore, 40 C.F.R § 60.18 is not applicable.

Greenhouse Gas Permitting. There have been no modifications to this facility that have triggered PSD permitting, thus there are no applicable greenhouse gas Clean Air Act requirements applicable to this facility.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: April 7, 2011
Ending Date: May 9, 2011

All written comments should be addressed to the following individual and office:

Rex Compston
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Rex Compston
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.